PSBD3D40V1HJ



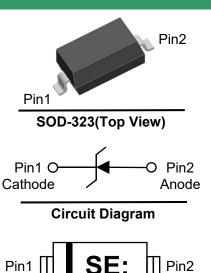
Schottky Barrier Diode

Feature

- > Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Mechanical Characteristics

- Case: SOD-323
- > Terminals: Solderable per MIL-STD-750, Method 2026
- > Approx. Weight: 5.48mg / 0.00019oz



Marking (Top View)

Symbol Value Units Rating Peak Repetitive Reverse Voltage 40 V V_{RRM} V **RMS Voltage** V_{RMS} 28 **DC Blocking Voltage** V_{DC} 40 V Average Forward Rectified Current 1.0 А I_{F(AV)} Peak Forward Surge Current 8.3 ms Single Half Sine Wave 30 Superimposed on Rated Load(JEDEC method) А I_{FSM} Peak Forward Surge Current 1.0 ms Single Half Sine Wave 60 Superimposed on Rated Load(JEDEC method) l²t I²t Rating for fusing (3ms≤t≤8.3ms) 3.7 A²S Forward Voltage@I_F = 1A 0.55 V V_{F} T₂=25℃ 0.3 DC Reverse Current at Rated DC Blocking Voltage mΑ I_R T_=100°C 10 Typical Junction Capacitance @ V_R=4V, f=1MHz C. 55 pF 150 $R_{\theta JA}$ Typical Thermal Resistance¹⁾ 50 °C/W R_{0.IC} 75 $R_{\theta JL}$ -55 ~ +150 °C Junction and Storage Temperature Range T_J,T_{STG} Notes

1. P.C.B. mounted with 0.1" X 0.1" (2.54 X 2.54 mm) copper pad areas.

Absolute maximum rating@25°C

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Typical Characteristics

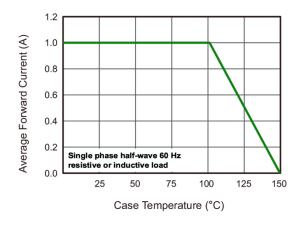


Fig.1 Forward Current Derating Curve

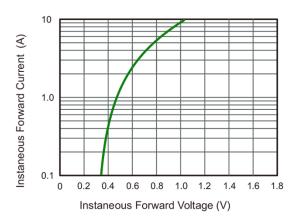


Fig.3 Typical Forward Characteristic

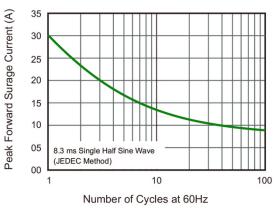


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

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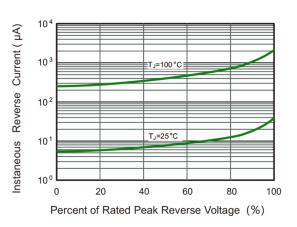


Fig.2 Typical Reverse Characteristics

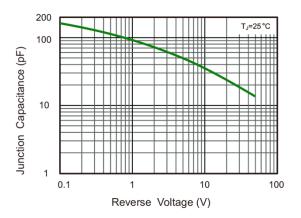
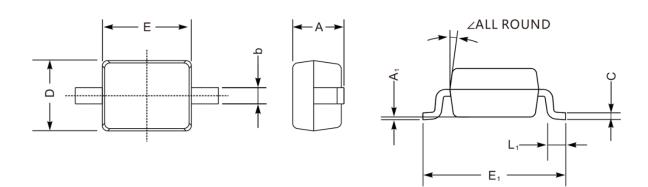


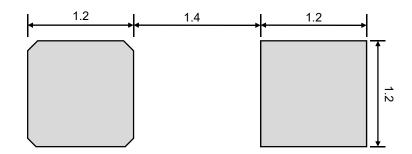
Fig.4 Typical Junction Capacitance

Schottky Barrier Diode

Product dimension (SOD-323)



Dim	Millimeters		Inches	
	Min	Max	Min	Max
А	0.80	1.10	0.031	0.043
A1	-	0.20	-	0.008
С	0.08	0.15	0.003	0.006
D	1.20	1.40	0.047	0.055
E	1.40	1.80	0.055	0.071
E1	2.55	2.75	0.100	0.108
b	0.25	0.40	0.010	0.016
L1	0.20	0.45	0.008	0.018
۷	9°		9°	



Suggested PCB Layout

Unit: mm

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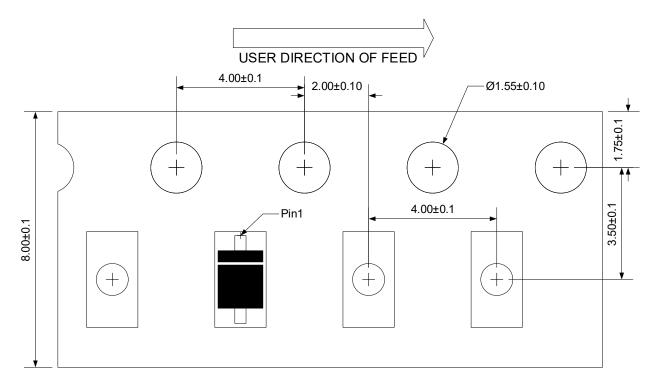
Schottky Barrier Diode

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Ordering information

Package	Reel	Shipping
SOD-323	7"	3000 / Tape & Reel

Load with information



Unit:mm

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